

PRELIMINARY

CameraManSTUDIO™

System II

Broadcast Production Systems

Visibly Better. With Revolutionary Technology.

CSS-2000

CSS-2313

CSS-2017

Introducing CameraManSTUDIO™ from ParkerVision. The first PC-based studio production system to combine Digital Video Effects, Digital Audio Mixing, VCR Control and the latest in 1-CCD, and 3-CCD CameraMan robotic camera control systems into one interface. This revolutionary technology is a must-have system for studio applications.

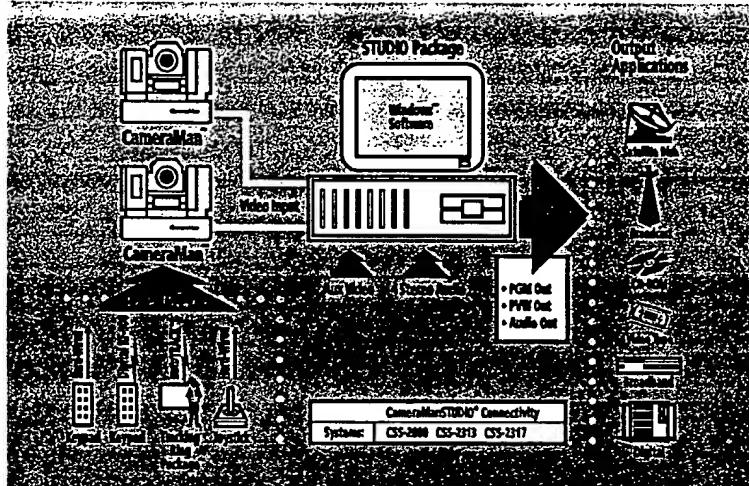
The CameraManSTUDIO™ allows the director to manage and control a multi-camera studio environment with limited resources. By bringing a low-cost camera and studio automation control solution to the industry, CameraManSTUDIO™ directors with limited resources can focus more of their talents on overall production. The CameraManSTUDIO™ is the "value-conscious" solution with professional-quality performance for:

- Independent Studios
- Corporate Production Studios
- Health Care Production Studios
- Government Production Studios
- Education Production Studios
- Religious Broadcast and Studio Productions
- Small Cable and Public Broadcast Networks
- Law Enforcement Production Studios

The integrated CameraMan camera systems also incorporate all of ParkerVision's exclusive camera-control technology with features such as autoTRACK™, WhisperDRIVE Plus™, Digital RF-900™ keypad control, and exceptional location preset accuracy.

System Features

- Common PC interface for video production, including camera control, video switching and special effects, audio mixing, titling, and VCR control.
- User-friendly Windows™ interface.
- Complete plug-and-play system package NTSC or PAL.



Camera Control Features

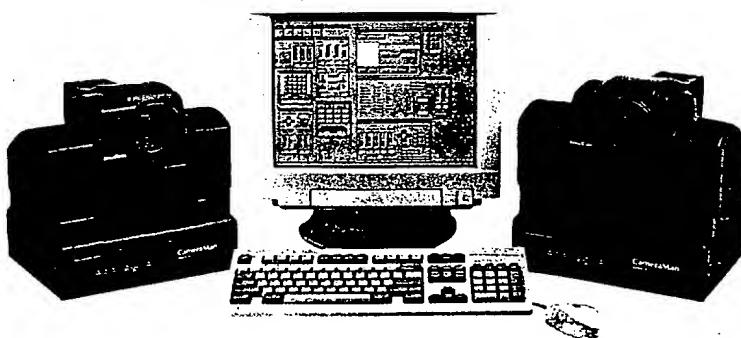
- Control of up to 6 cameras.
- Store and recall unlimited number of location presets.
- Location presets can store a pan/tilt position, zoom perspective, focus, and IMAGE™ setting.
- Adjust all camera parameters including gain, paint, master pedestal, etc.
- Virtual joystick control.
- Variable speed control.

Options

- Separate hard-wired joystick.
- Camera shot-profiler software.

Studio System Features

- Digital video effects unit with over 2,500 different effects.
- Dissolve, fade, zoom, slide, shrink, tumble, strobe, posterizing, curtain effects, etc.
- Luminance and chroma keyers
- 6 separate composite, 4 component, and 4 y/c video inputs.
- 8 channel audio mixer.
- Tape machines are controlled via RS-422.
- Preview Output.
- Program Output.



Why

CameraManSTUDIO™?

For these features available only from ParkerVision.

Communication and studio directors can maximize their talents through the use of CameraMan's proprietary autoTRACK™ technology. With automated presenter tracking, the director can focus efforts on other camera views and shot selections.

All studio functions are centralized and controlled from the CameraManSTUDIO™ control center.

CameraManSTUDIO™ can control up to 6 CameraMan camera systems - each with the ability to support unlimited location presets with 125% of accuracy.

Powered by a Pentium processor.

17" Color Monitor, PC mouse and joystick provide maximum control flexibility and ease-of-operation.

Quality audio and video output for satellite, cable, public switched networks, microwave transmission or for CD-ROM, videotape, and digital storage.

For more information or a product demonstration, contact us at:

8493 Baymeadows Way

Jacksonville, FL 32256-9886

904-737-1367 or

1800-532-8034 or

904-731-0958 fax

or e-mail to parkervisionsoutheast.net

PARKERVISION®
Visibly Better.™

visit our website at <http://www.parkervision.com>

Visibly Better. With Revolutionary Technology.

Studio PC Features:

- Intel Pentium @ 133 MHz
- Monitor: 17" SVGA, 1280x1024, .26 Dot Pitch
- 1.2 GB IDE Hard Drive, 6x CD-ROM
- 32 MB RAM, upgradeable to 256 MB
- Windows NT workstation with CameraManSTUDIO™ software

Video Features:

- Blackburst gen-lockout input
- (2) infinite window TBC's with digital proc amp adjustments (gain, set-up, hue, and saturation)
- Digital video comb filter
- Independent preview and program output
- Linear Key output
- Multi-Layer real-time digital video mixer
- (1) alpha channel keyer, (2) luminance keyers and (2) wipe/tile generators—all with anti-aliased edges.
- (2) chroma keyers with advanced chroma suppression and shadow preservation.

- Six background generators for dynamic color ramps, static colors and noise.

- Software selection among (6) composite, (4) Y/C, or (4) analog component input signals

- Supports full and half-blending key modes

- Frequency Response (Input to Output):

- Y: -0.25 dB Max @ 0-4.5 MHz

- R-Y/B-Y: -0.5 dB Max @ 0-2.0 MHz

- Amplitude Deviation: +2 IRE Max

- Diff. Phase: <1.5°

- S/N Ratio: > 58 dB

- Chroma-Luma Delay: < 15 nS

- Digital Data: SMPTE 125M

- Analog Y/R-Y/B-Y: Betacam

- Analog Composite and Y/C: RS-170A

Audio Features:

- Sampling Rates: 44.1 & 48 KHz

- Resolution: 16 bits

- Analog inputs: 8 balanced, +4dB/ -10dB

- Analog outputs: 8 balanced, +4dB/ -10dB

- Frequency Response: 20 Hz - 20 KHz, + 0.5 dB

- Dynamic Range: 92 dB typical

- THD: 1 KHz: 0.003% typical

- Crosstalk: 1 KHz: -95 dB

- Equalizer: High, Mid, and Low frequency of each input.

VCR Control:

- Remote control of (2) source VCRs and (1) record VCR
- (2) LTC and VITC reader/generators

Transition Macros:

- A sequence of operations, along with the associated delays and operation times, incorporating all controlled devices can be stored and assigned to a recall button.

Special Effects:

- Mosaic, flips, tumbles, Chroma/Luma Keyers
- Luminance Keyers with adjustable Gain & Clip
- Over 100 wipe patterns with 25 different repeat factor variations, with offsets and anti-aliasing edges



With the optional joystick controller, you can control multiple camera parameters (ccu) from a single point.



PARKERVISION®
Visibly Better.™

The terms WhisperDRIVE Plus, autoTRACK, IMAGE, Digital RF-900, Personal Locator Keypad, Chairperson Locator Keypad, and Personal Locator Camera System are registered trademarks of ParkerVision, Inc. in the United States of America. The terms CameraMan and ParkerVision are registered logos in the United States of America. Any commercial use of these registered trademarks and logos is prohibited by federal laws. The manufacturer reserves the right to change specifications and/or prices at any time without notice or obligation. ® Registered Marks of ParkerVision, Inc. ™ Registered Trademarks of ParkerVision, Inc.

ParkerVision offers the following CameraManSTUDIO™ Systems

- NTSC models indicated by G2N, A1N, A3N, and PGN suffixes
- PAL versions indicated by G2P, A1P, A3P, and PGP suffixes

General Pan/Tilt Systems:

| | |
|-------------------|--|
| CSS-2000-G2N(G2P) | 1-CCD (Single-Chip) Studio System Components: |
| | • 2 CPT-2000-A1N(A1P) |
| | • 1 SPC-2000-N(P) |
| CSS-2313-G2N(G2P) | 3-CCD (Three-Chip, 13x Lens) Studio System Components: |
| | • 2 CPT-2013-A3N(A3P) |
| | • 1 SPC-2000-N(P) |
| CSS-2317-G2N(G2P) | 3-CCD (Three-Chip, 17x Lens) Studio System Components: |
| | • 2 CPT-2017-A3N(A3P) |
| | • 1 SPC-2000-N(P) |

Presenter Systems:

| | |
|-------------------|--|
| CSS-2000-PGN(PGP) | 1-CCD (Single-Chip) Studio System Components: |
| | • 1 CPT-2000-A1N(A1P) |
| | • 1 CPC-2000-A1N(A1P) |
| | • 1 SPC-2000-N(P) |
| CSS-2313-PGN(PGP) | 3-CCD (Three-Chip, 13x Lens) Studio System Components: |
| | • 1 CPT-2013-A3N(A3P) |
| | • 1 CPC-2013-A3N(A3P) |
| | • 1 SPC-2000-N(P) |
| CSS-2317-PGN(PGP) | 3-CCD (Three-Chip, 17x Lens) Studio System Components: |
| | • 1 CPT-2017-A3N(A3P) |
| | • 1 CPC-2017-A3N(A3P) |
| | • 1 SPC-2000-N(P) |